REMARKS/ARGUMENTS

Claims 21 through 42 and 44 through 89 are pending in this case.   No new

amendments are proposed.

Claims 21 through 42 and 44 through 89 stand rejected under 35 U.S.C. § 103(a) as

allegedly being obvious over U.S. Patent 6,317,726 (O'Shaughnessy II) in view of U.S.

Patent 6,012,042 (Black), U.S. Patent 6,021,778 (Jones), and U.S. Patent 5,784,696

(Melnikoff). Claims 44, 57, and 81 stand rejected under 35 U.S.C. § 101 as allegedly

directed to unpatentable subject matter for failing to define a concrete, useful, tangible output.

Applicants' undersigned representative respectfully traverses these rejections and

requests reconsideration of the present application in light of the below-recited remarks.

Initialed PTO FORM-1449

In a communication mailed October 20, 2000, Applicants submitted an Information

Disclosure Statement and PTO-1449 (copy enclosed). **Despite repeated requests**, an

Examiner-initialed copy of the PTO-1449 has not been received. Applicants' undersigned

representative respectfully requests that the Examiner provide an initialed copy of the PTO-

1449 indicating the Examiner has considered the references in connection with this

application.

The Section 101 Rejections

The Examiner has rejected claims 44, 57, and 81 under 35 U.S.C. § 101 as allegedly

failing to define a concrete, useful, tangible result. Applicants' undersigned representative

respectfully disagrees.

Claim 44 is directed to "[a] computer-readable medium comprising computer-executable instructions for identifying financial instruments meeting user-defined investment criteria." Similarly, claim 57 is directed to "[a] computer-readable medium comprising computer-executable instructions for identifying financial instruments meeting user-defined investment criteria." Likewise, claim 81 is directed to "[a] computer-readable medium comprising computer-executable instructions for identifying financial instruments meeting user-defined investment criteria." Thus, each of the rejected claims is directed to computer-readable media comprising computer executable instructions for performing a function as specified in the claim body.

In the case *In re Beauregard,* the Court of Appeals for the Federal Circuit held that computer-readable media having computer programs thereon is patentable subject matter under 35 U.S.C. § 101. 35 U.S.P.Q.2d 1383 (Fed. Cir. 1995). Accordingly, claims 44, 57, and 81 are clearly directed to patentable subject matter.

Furthermore, each of claims 44, 57, and 81 are comprise computer executable instructions *for identifying financial instruments*. Claim 44 recites, among other acts, "transmitting to the user for display data identifying at least one of the financial instruments having values for the searchable parameters matching the modified user-defined search criteria." Claim 58 recites, among other acts, "returning a representation of at least one of the plurality of financial instruments having values for the searchable parameters satisfying the modified user-defined search criteria to the user over the computer communications network." Claim 81 recites, among other acts, "presenting to a user the set of financial instruments having values for the searchable parameters matching the modified user-defined search criteria." Thus, not only do claims 44, 57, and 81 recite computer-readable media

which is clearly patentable subject matter, but the computer-readable media comprise

executable code that result in concrete, useful, and tangible results.

Withdrawal of the rejection is requested. If the Examiner maintains the rejection,

Applicants' undersigned representative respectfully requests that the Examiner explain why

the holding of *In re Beauregard* does not apply to the rejected claims and/or why the claims

are not directed to a useful, concrete, and tangible computer program.

The Section 103 Rejections

In the Office Action Response filed October 8, 2003, Applicants' undersigned

representative submitted remarks distinguishing the independent claims from

O'Shaughnessy, Black, and Melnikoff. Further, Applicants' undersigned representative

requested that the Examiner identify the basis for his rejection of the dependent claims and

point to the specific locations within the references that provide motivation and/or support for

combining the references as proposed by the Examiner. Despite these specific requests, in

the Office Action issued October 30, 2003, the Examiner has not clearly identified the

language from the references that teach, suggest and/or correspond to each limitation of each

claim. Instead, the Examiner has made substantially the same rejection, although he now

cites a new reference, Jones, *that is not even prior art to the present application.* If the

Examiner maintains the rejections, Applicants' undersigned representative requests that the

Examiner, **for each claim** of the patent application including all dependent claims, clearly

quote the specific language in each reference that teaches or suggests **each element of**

each claim. Furthermore, to advance prosecution, Applicants' undersigned representative

requests that the Examiner **quote the specific language within the references** that the

Examiner alleges teaches combining the references to form the claimed systems and methods.

The Examiner's cooperation would be appreciated.

The Disclosed Invention

The present application discloses "a method of filtering and sorting online financial

data." (Application, Field of the Invention). More specifically, the claimed invention relates

to "an interactive method . . . for timely processing data to meet the criteria of individual

clients. This criteria can be easily changed to allow these clients the ability to request many

variations of the data based on their individual needs." (Application, Summary of the

Invention).

Claim 21, which comprises limitations analogous to those in the other independent

claims, is directed to a "method of identifying financial instruments meeting user-defined ·

investment criteria." The claimed method comprises the following steps:

> retrieving financial instrument data from at least one
> data source;
> processing the financial instrument data to identify
> values for a plurality of searchable parameters for particular
> financial instruments in said financial instrument data;
> **receiving user-defined search criteria for said
> searchable parameters;**
> **comparing the user-defined search criteria with the
> values identified for the searchable parameters for the
> particular financial instruments;**
> **identifying at least one of the financial instruments
> having values for the searchable parameters matching the
> user-defined search criteria;**
> **transmitting to the user for display data identifying
> at least one of the financial instruments having values for
> the searchable parameters matching the user-defined
> search criteria;**
> **receiving modified user-defined search criteria for
> said searchable parameters;**

> comparing the modified user-defined search criteria
> with the values identified for the searchable parameters for
> the particular financial instruments;
> identifying at least one of the financial instruments
> having values for the searchable parameters matching the
> modified user-defined search criteria; and
> transmitting to the user for display data identifying
> at least one of the financial instruments having values for
> the searchable parameters matching the modified user-
> defined search criteria.

In order for a set of references to render claim 21 obvious, the references must teach the combination of all of the claimed elements, including those emphasized. Applicants' undersigned representative respectfully submits that the cited references do not even teach all of the claimed elements individually and certainly do not suggest the claimed combination. Indeed, none of the cited references suggest an interactive system for receiving iterative user-defined search criteria.

The Cited References Do Not Render the Claimed Invention Obvious

The Examiner cites U.S. Patent 6,317,726 (O'Shaughnessy II) as prior art. As the Examiner correctly points out, O'Shaughnessy II is a continuation-in-part of prior application 08/995,296 filed on December 20, 1997, which has since issued as U.S. Patent 5,978,778 (O'Shaughnessy I). Thus, the subject matter that existed in the prior O'Shaugnessy application, i.e. O'Shaughnessy I, is prior art to the present application. However, the new matter that was added, i.e. the "in-part" portion of the O'Shaugnessy II, has a filing date of July 27, 1999. Importantly, the present application has an effective filing date of May 29, 1998 and claims priority back to provisional patent application 60/055,403 filed August 8, 1997. Accordingly, the new matter added to O'Shaugnessy II upon its filing (wherein the new matter includes at least items 1-12 and 1-13 of Fig. 1; items 2-10 through 2-15 of Fig. 2;

and Figures 3 through 17 and associated text) is not prior art to the present application.

Rather, the only matter of O'Shaughnessy II that is prior art to the present application, is that

matter that existed in O'Shaughnessy I.

Furthermore, U.S. Patent 5,978,778 (O'Shaughnessy I), from which O'Shaughnessy

II is a continuation-in-part, does not teach the elements of the claimed invention.

O'Shaughnessy I teaches a method for selecting a portfolio of stocks. Specifically,

O'Shaughnessy I teaches screening stocks against a **predetermined, i.e. not user-defined**,

set of criteria to arrive at an alleged optimal portfolio of stocks. As illustrated in Figures 1

and 2 of O'Shaughnessy I, the stocks are screened sequentially against the predetermined set

of criteria, with the stocks not meeting any one criteria being removed from further

evaluation. In contrast to O'Shaughnessy I, Applicants' claim 21 recites the following:

"receiving user-defined search criteria for said searchable parameters;" "comparing the user-

defined search criteria with the values identified for the searchable parameters for the

particular financial instruments;" "identifying at least one of the financial instruments having

values for the searchable parameters matching the user-defined search criteria;" "transmitting

to the user for display data identifying at least one of the financial instruments having values

for the searchable parameters matching the user-defined search criteria;" "receiving modified

user-defined search criteria for said searchable parameters;" "comparing the modified user-

defined search criteria with the values identified for the searchable parameters for the

particular financial instruments;" "identifying at least one of the financial instruments having

values for the searchable parameters matching the modified user-defined search criteria;" and

"transmitting to the user for display data identifying at least one of the financial instruments

having values for the searchable parameters matching the modified user-defined search

criteria." O'Shaughnessy I entirely fails to teach these claimed elements or to even suggest

the user-interactive searching provided for by the claimed systems and methods. Indeed, by

teaching a system employing a predetermined set of filtering criteria, O'Shaughnessy I

actually teaches away from accepting user-defined criteria, comparing these to values for

searchable parameters, receiving modified user-defined criteria, and comparing these to

values for searchable parameters. In a system such as taught by O'Shaugnessy I, a user may

not even know what the selection criteria employed by the system are.

The Examiner admits that O'Shaughnessy does not teach receiving user-defined

search criteria for the searchable parameters, but alleges that Black teaches "user defined and

selected analysis techniques." (Office Action, p. 3). Applicants' undersigned representative

respectfully disagrees with the Examiner's characterization of the Black reference. Black is

directed to a security analysis system which has the purported advance of combing technical

data and fundamental data. Black teaches "converting both technical and fundamental data

about a security into a unified format for analysis" (Summary of the Invention). The

converted data is processed "in accordance with a set of rules and the results are forwarded to

a display for viewing" (Summary of the Invention). The Examiner alleges that Black teaches

"accepting user defined search criteria for the searchable parameters" at Col. 10, ll. 57-67 and

Col 11, ll. 8-11 (Office Action, p. 3). The portion of the reference to which the Examiner

cites indicates

> "an analyst or user of a computer system incorporating the
> subject matter of the present invention is preferably able to
> choose from a variety of technical and fundamental analysis
> techniques and methodologies. Accordingly, the particular
> user, who may interpret the results of a technical or
> fundamental analysis differently, is preferably able to adapt the
> security analysis system of the present invention to their own
> tastes or risk preferences. The technical and fundamental data

> are therefore preferably weighed, and a user can customize
> their analysis."

Black, Col. 10, ll. 57-67. "Adapting" the security analysis system and "customizing"

analysis, as taught by Black, appears to be accomplished by "choos[ing] from a variety of

technical and fundamental analysis techniques and methodologies." Id. Choosing from a

variety of technical and analysis techniques is not the same as user-defined search criteria.

Black simply does not teach or even suggest the following: "receiving user-defined search

criteria for searchable parameters;" "comparing the user-defined search criteria with the

values identified for the searchable parameters for the particular financial instruments;"

"identifying at least one of the financial instruments having values for the searchable

parameters matching the user-defined search criteria;" "transmitting to the user for display

data identifying at least one of the financial instruments having values for the searchable

parameters matching the user-defined search criteria;" "receiving modified user-defined

search criteria for said searchable parameters;" "comparing the modified user-defined search

criteria with the values identified for the searchable parameters for the particular financial

instruments;" "identifying at least one of the financial instruments having values for the

searchable parameters matching the modified user-defined search criteria;" and "transmitting

to the user for display data identifying at least one of the financial instruments having values

for the searchable parameters matching the modified user-defined search criteria." In fact,

Black specifies that the "analytical rules [for processing converted technical and fundamental

data] may be found in rules storage device 28 and retrieved by engine 20 via line 30." (Black,

Col. 4, ll. 48-52.). Thus, Black, like O'Shaugnessy I teaches fixed analytical rules for

processing data that are predefined, are stored in a storage device, and retrieved when

necessary. In contradistinction, the claims require receiving user-defined search criteria for

the searchable parameters and receiving modified user-defined search criteria. Using the

claimed systems and methods, a person can repeatedly modify his or her search criteria based

upon observed results. Unlike the fixed analysis system described by Black which use stored

rules, searches employing the claimed methods may be variable and interactive.

Furthermore, even if Black taught the limitations suggested by the Examiner, there is

no motivation to combine this teaching of Black with O'Shaughnessy. In order to establish a

prima facie case of obviousness, there must be some suggestion or motivation, either in the

references themselves or in the knowledge generally available to one of ordinary skill in the

art, to modify the reference or to combine reference teachings. MPEP § 2143. The teaching

or suggestion to make the claimed combination and the reasonable expectation of success

must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2143

citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Even if, as alleged,

Black taught the claimed limitations there is no suggestion in Black that these limitations

should or could be used in another system, and more particularly one such as O'Shaughnessy.

Indeed, there is no teaching by Black that the disclosed system, and in particular specific

aspects of the disclosed system, are suitable and useful in other systems such as one disclosed

by O'Shaughnessy. The section of the Black reference to which the Examiner cites as

providing support for motivation to combine indicates it was an *object of Black's disclosed*

invention to provide an improved system (Black, Col. 2, ll. 60-67). Black simply does not

teach that the disclosed system or particular components of the disclosed system are suitable

for use in other systems. One skilled in the art simply would not combine O'Shaugnessy and

Black to arrive at the claimed invention. Applicants' undersigned representative respectfully

requests that if the Examiner maintains the rejection, he point to the specific location(s) in the

Black reference that allegedly provide the motivation to combine the reference and the

particular teachings relied upon for the rejection with the O'Shaugnessy reference.

The Examiner alleges Melnikoff teaches "searching the values identified from the set

of searchable parameters for values matching the user-defined search criteria" and

"identifying a set of financial instruments corresponding to values for the searchable

parameters matching the user-defined search criteria." (Office Action, p. 3.) Applicants'

undersigned representative respectfully disagrees. Melnikoff is directed to methods for

evaluating portfolios based on investment risk. According to Melnikoff, an asset, or a set of

assets and their relative proportions, are selected from a library of assets to form a tentative

investment portfolio. (Melnikoff, Col. 6, ll. 15-17). The average relative performance of the

portfolio is computed. (Melnikoff, Col. 6, ln. 16.) The performance of the tentative portfolio

is compared to risk criteria derived from investor preference data. If the criteria are satisfied,

the tentative portfolio is designated as the investment portfolio. If not, a new tentative

portfolio is selected and the processing sequence is repeated in an iterative manner until the

criteria derived from the investor preference data are satisfied. (Melnikoff, Col. 4, ll. 32-29.)

Thus, Melnikoff teaches a risk analysis/portfolio allocation system that employs an

automated iterative loop for testing potential portfolio asset allocations against a desired

investment risk to arrive at a portfolio. The desired investment risk is determined from

interviews with the user. This is in contradistinction to the claimed systems and methods

which are directed *to identifying financial instruments, and not portfolios.* Furthermore,

Melnikoff simply does not teach "processing the financial instrument data to identify values

for a plurality of searchable parameters for particular financial instruments in said financial

instrument data," "receiving user-defined search criteria for said searchable parameters,"

"identifying at least one of the financial instruments having values for the searchable

parameters matching the user-defined search criteria;" "transmitting to the user for display

data identifying at least one of the financial instruments having values for the searchable

parameters matching the user-defined search criteria;" "receiving modified user-defined

search criteria for said searchable parameters;" "comparing the modified user-defined search

criteria with the values identified for the searchable parameters for the particular financial

instruments;" "identifying at least one of the financial instruments having values for the

searchable parameters matching the modified user-defined search criteria;" and "transmitting

to the user for display data identifying at least one of the financial instruments having values

for the searchable parameters matching the modified user-defined search criteria." Indeed,

because Melnikoff does not even mention "processing the financial instrument data to

identify values for a plurality of searchable parameters for particular financial instruments in

said financial instrument data," and "receiving user-defined search criteria for said searchable

parameters," Melnikoff cannot possibly teach "comparing the user-defined search criteria

with the values identified for the searchable parameters for the particular financial

instruments" and "identifying at least one of the financial instruments having values for the

searchable parameters matching the user-defined search criteria."

Furthermore, even if Melnikoff taught the limitations suggested by the Examiner,

there is no motivation to combine these teachings of Melnikoff with O'Shaughnessy and

Black. In order to establish a prima facie case of obviousness, there must be some suggestion

or motivation, either in the references themselves or in the knowledge generally available to

one of ordinary skill in the art, to modify the reference or to combine reference teachings.

MPEP § 2143. The teaching or suggestion to make the claimed combination and the

reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2143 citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The Examiner alleges "The motivation to combine . . . . is to teach a method for selection of groupings of securities based on risk definition and measurement as enunciated by Melnikoff." (Office Action, Page 3.) Even if, as alleged, Melnikoff taught the claimed limitations, which it does not, there is no suggestion in Melnikoff that these limitations should or could be used in another system, and more particularly the systems disclosed in O'Shaughnessy and Black. The section of the Melnikoff reference to which the Examiner cites as providing support for the motivation to combine indicates it was an object of Melnikoff's invention to provide methods and apparatus that are understandable and assist in the selection of a portfolio of mutual funds (Melnikoff, Col. 5, ll. 25-37 and Col. 5, ln. 63 – Col. 6, ln. 3). Melnikoff simply does not teach that the disclosed system and the particular components relied upon for the rejection are suitable for use in *other systems*. One skilled in the art simply would not combine O'Shaugnessy, Black, and Melnikoff to arrive at the claimed invention. Applicants' undersigned representative respectfully requests that if the Examiner maintains his rejection, he point to the specific location(s) in the Melnikoff reference that allegedly provide the motivation to combine the reference, and in particular the elements alleged to be taught by Melnikoff, with the O'Shaugnessy and Black references.

The Examiner has cited the Jones reference, although it is unclear for what purpose the Examiner has cited the reference. The Office Action provides no explanation of what claim terms Jones allegedly teaches. Regardless, Jones is not prior art to the present application. Jones issued from an application filed on December 2, 1997. The present

application claims priority to U.S. Provisional Application 60/055,403 filed on August 8, 1997. Accordingly, Jones is not prior art.

Furthermore, even if Jones were prior art, it does not teach or even suggest the systems and methods of the present application. Similar to Melnikoff, Jones teaches a system for identifying portfolio allocations. (Abstract.) Similar to Melnikoff, Jones teaches searching for a portfolio using a user's risk preference, savings rate, and desired risk-return tradeoffs. Col. 6, ll. 15-16. This is in contradistinction to the claimed systems and methods which are directed to *identifying financial instruments, and not portfolios*. Furthermore, Jones like Melnikoff simply does not teach "processing the financial instrument data to identify values for a plurality of searchable parameters for particular financial instruments, in said financial instrument data," "receiving user-defined search criteria for said searchable parameters," "identifying at least one of the financial instruments having values for the searchable parameters matching the user-defined search criteria;" "transmitting to the user for display data identifying at least one of the financial instruments having values for the searchable parameters matching the user-defined search criteria;" "receiving modified user-defined search criteria for said searchable parameters;" "comparing the modified user-defined search criteria with the values identified for the searchable parameters for the particular financial instruments;" "identifying at least one of the financial instruments having values for the searchable parameters matching the modified user-defined search criteria;" and "transmitting to the user for display data identifying at least one of the financial instruments having values for the searchable parameters matching the modified user-defined search criteria." Indeed, because Jones does not even mention "processing the financial instrument data to identify values for a plurality of searchable parameters for particular financial

instruments in said financial instrument data," and "receiving user-defined search criteria for

said searchable parameters," Jones cannot possibly teach "comparing the user-defined search

criteria with the values identified for the searchable parameters for the particular financial

instruments" and "identifying at least one of the financial instruments having values for the

searchable parameters matching the user-defined search criteria."

Thus, the Examiner admits that O'Shaughnessy does not teach receiving user-defined

search criteria for searchable parameters, comparing the user-defined search criteria with the

values identified for the searchable parameters for the particular financial instruments, and

identifying the financial instruments having values for the searchable parameters matching

the user-defined search criteria. O'Shaughnessy likewise does not teach or even suggest the

added claim limitations. Furthermore, a detailed reading and understanding of Black and

Melnikoff shows that neither teaches nor even suggests these individual claim elements, and

most certainly do not suggest their combination. Finally, Jones is not even prior art to the

present application, and even if it were, it entirely fails to teach the claimed limitations.

Accordingly, Applicants' undersigned representative respectfully submits that all claims

patentably define over the prior art references and requests withdrawal of the prior art

rejections.

Dependent Claims

Dependent claims 22-44, 46-64, 59-64, 66-80, and 82-89 stand rejected under 35

U.S.C. § 103(a). The Examiner makes numerous assertions regarding the alleged teachings

of the cited references but has not demonstrated the claim terms to which any of the alleged

teachings correspond. Indeed, the Examiner has not illustrated where in the cited references

the claimed limitations are taught. In truth, the dependent claims are patentable over the cited

references.

For example, with respect to claims 27, the Examiner has not pointed to the language

in the cited references that allegedly teaches or suggests "wherein calculating data values for

the searchable parameters from the financial instrument data comprises the step of calculating

values for at least one of the following search parameters: Black-Scholes value, percent if

called, percent if not called, in the money, out of the money, volatility, earnings change, and

spread between called and not called." The cited references do not teach this claim element.

With respect to claim 28, the Examiner has not pointed to the language in the cited

references that allegedly teaches or suggests "wherein the step of comparing the user-defined

search criteria with the values identified for the searchable parameters comprises the step of

searching financial instrument data comprising at least one of the following: open interest;

option month; spread between called and not called; price; volume; volatility; price earnings

ratio; earnings change; percentage volume change; number of shares; range between high and

low values; and put options." The cited references do not teach this claim element.

With respect to claim 29, the Examiner has not pointed to the language in the

references that allegedly teaches or suggests "confirming that a user is authorized to request a

search of the searchable parameters." The cited references do not teach this claim element.

With respect to claim 30, the Examiner has not pointed to the specific language in the

references that allegedly teaches or suggests "confirming that a user is authorized to request a

search of the searchable parameters comprises the step of confirming that a user has paid

prior to executing a search of the searchable parameters." The cited references do not teach

this claim element.

With respect to claim 32, the Examiner has not pointed to the specific language in the references that allegedly teaches or suggests "establishing accounts for users, and storing in relation to the accounts at least one user-defined set of criteria for searching the searchable parameters." The cited references do not teach this claim element.

The Examiner has failed to demonstrate where in the cited references these and almost all of the other limitations from the dependent claims are taught. Applicants' undersigned representative respectfully submits that the rejections must be withdrawn. Furthermore, Applicants' undersigned representative respectfully requests that if the Examiner maintains the rejections of the dependent claims, **he clearly and unambiguously identify the language in the reference that allegedly teaches each claim element of each claim**.

CONCLUSION

For all the foregoing reasons, Applicants respectfully submit that claims 21-42 and 44-89 patentably define over the prior art of record. Reconsideration of the present Office Action and a Notice of Allowance are respectfully requested.

Date: March 1, 2004

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